

MISCELLANEOUS.

On Pristolepis marginatus, Jerd.

To the Editors of the Annals and Magazine of Natural History.

GENTLEMEN,—Some time since, Dr. Günther founded the genus *Catopra* on a freshwater fish from Siam; and he has recently added another species to the genus, from the west coast of India, under the name of *Catopra malabarica*.

In 1849 or 1850 I described that very genus under the name of *Pristolepis*, founding it on the identical species lately described by him from the Malabar coast, which I named *Pristolepis marginatus*. It is very possible that Dr. Günther may not have seen my paper on the freshwater fishes of Southern India, published in the 'Madras Journal of Literature and Science'; but it is quite as likely that he has seen and ignored it; and I therefore beg to call his attention to it, as well as that of other naturalists who may not be disposed to treat so slightly the labours of fellow-workers in natural science, writing under every disadvantage in a foreign land. It is very possible that the generic name bestowed by me may have been previously applied, in which case Dr. Günther's name will stand. This fish, I may remark, is found in rapid rivers in Malabar, and also in the elevated region of the Toynaad, the waters of which flow into the Cauvery, on the eastern coast of India. It frequents chiefly rapids; and I have taken it with bait. I have not seen it longer than 9 or 10 inches.

Some two or three years ago Dr. Günther contributed a short paper to the Zoological Society, remarking on the extension of several marine genera of fishes to Nepal, apparently on the strength of certain specimens in Mr. Hodgson's collection. I have not the paper now by me to refer to; but among others were *Therapon* and, I think, *Scatophagus*. I need hardly say that the extension of any of those marine and estuary fishes to Nepal is perfectly mythical; and I am sure that Mr. Hodgson himself would not countenance the idea for one moment. He probably purchased the fishes at Calcutta.

I intended at the time I saw this paper to have sent you a note on the subject, and indeed wrote out a short paper; but it was delayed through some cause or other.

I am, Gentlemen, yours obediently,

Srinuggur, Cashmere,
Aug. 7, 1865.

T. C. JERDON,
Surgeon-Major.

[In answer to the above statements, we have received the following from Dr. Günther.—ED. ANN. NAT. HIST.]

1. It is scarcely necessary to say that Mr. Jerdon is in error in believing that the genus *Catopra* was founded by me; it was established by Dr. Bleeker in 1851.

2. Mr. Jerdon's paper on Indian Fishes is known to me; the description of *Pristolepis*, however, bears so much the stamp of being written "under every disadvantage in a foreign land," that neither I myself nor Dr. Bleeker were able to recognize *Catopra* in it.

3. Since I wrote my paper on Mr. Hodgson's collection of fishes, I have ascertained that not only all the Indian species of *Therapon* enter fresh waters freely, but that several are exclusively freshwater fish.—A. GÜNTHER.

On the Constitution of the Fruit in the Cruciferæ.

By M. E. FOURNIER.

When a horizontal section is made of a bilocular Cruciferous fruit, especially of a young ovary after the amalgamation of the two parts of the septum, the latter is seen to be bifurcate at each extremity, and to embrace in the angle produced by this bifurcation the elongated column from which the two rows of ovules originate, described by the author as the placenta. This arrangement produces a triangular canal extended longitudinally within each placenta, the horizontal section of which forms a triangle, with its apex at the point of bifurcation of the two lamellæ of the septum, and its base upon the placenta itself.

The placenta presents, passing inwards, the epidermis, a green parenchyma, cortical fibres, ligneous fibres, and tracheæ. The epidermis presents projections formed by the cuticle, which are very common in the Cruciferæ. The green parenchyma completely surrounds the placenta in most genera. It is continuous on each side with the subepidermal parenchyma of the valves, and more internally with the double origin of the septum, which springs directly from it. The cortical fibres exist only on the outer side of the placental column. The woody fibres, which contain chlorophyll at an early period, form around the tracheæ a ring which is thicker exteriorly than interiorly. The trophosperms originate from the placenta, sometimes within, sometimes outside of, the triangular canal; in the former case they perforate one of the lamellæ of the septum, to which they appear to be adnate.

The valves present a double epidermis, the outer one with longitudinally elongate cells, the interior with transverse cells, arranged in two or three series. Within the outer epidermis there is a parenchyma, in which vascular bundles ramify in various ways, according to the genera and species; this is separated from the inner epidermis by a remarkable undescribed fibrous layer. It is formed of very thick fibres, of which the section presents several concentric lines, and strongly refracts light. The form of the section is circular in *Lunaria biennis* and *Psychine*, elliptical in *Sisymbrium*. These fibres, when examined in the middle part of the horizontal section, form a simple row in *Lunaria* and *Sisymbrium*, several rows with parallel elements in *Psychine*, two rows with crossed elements in *Fibigia clypeata*, Med., and several rows with alternately crossed elements in *Raphanus* and *Enarthrocarpus*. Near the placentas they are always approximated, in several rows, and form a thicker tissue than in the middle of the valve. Analogous fibres are met with in many fruits (*Malus*, *Fraxinus*, *Nigella*, *Ervum*); but they are never so frequent in other families as in the Cruciferæ. They are absent from the walls of the ovary in the *Resedaceæ* and *Capparidaceæ*.